

The attached drawing sheet includes changes to Figure 1 and replaces the original sheet including Figures 1-3. Specifically, the legend "PRIOR ART" has been added to Figure 1.

Attachments:

- One (1) Replacement Sheet
- One (1) Annotated Sheet Showing Changes

REMARKS

This communication is a full and timely response to the final Office Action dated June 19, 2008. Claims 1-15 remain pending, where claims 7-9 are withdrawn. By this communication, claims 1-15 are amended. Support for the amended subject matter can be found, for example, at page 8, lines 11-23, page 9, lines 21-26 and Figs.2 and 3 of the Applicant's disclosure.

In numbered paragraph 3 on page 2 of the Office Action, the Examiner indicated that the IDS filed on 7/22/06 is improper for an alleged failure to include a PTO-1449. Applicant disagrees. As stated in the IDS letter, Applicant's intent of filing the statement was to provide a copy of the International Search Report, which cited references Applicant submitted in an IDS and Form PTO-1449 filed on February 7, 2006. Placement of the document in the file is satisfactory, since the substance of the International Search Report provided in the IDS filed on 7/22/06 is cumulative.

In numbered paragraph 4 on page 3 of the Office Action, Figure 1 is objected to for allegedly failing to include a "Prior Art" legend. Applicant appreciates the Examiner's diligence and has amended Figure 1 to include the "Prior Art" legend. Withdrawal is respectfully requested.

In numbered paragraph 5 on page 3 of the Office Action, the specification was objected to for an alleged non-descriptive title. Applicant respectfully traverses this rejection. However, in an effort to expedite prosecution, the title is amended for clarity.

In numbered paragraphs 6 and 7, claims 1-6 and 10-15 were objected to for alleged informalities and/or rejected under 35 U.S.C. §112, second paragraph for

alleged indefiniteness, where applicable. Applicant respectfully traverses the objection and rejection. However, in an effort to expedite prosecution, the claims are amended for clarity. Withdrawal of the objection and rejection is therefore, respectfully requested.

In numbered paragraph 10 on page 6 of the Office Action, claims 1-6 and 10-15 are rejected under 35 U.S.C. §102(b) for alleged anticipation by Applicant's Admitted Prior Art ("APA"). Applicant respectfully traverses this rejection.

As exemplified in Figures 2 and 3, Applicant discloses a circuit having a ceramic substrate 2. Conductive RF signal tracks 6 and 7 formed in a first conductive layer of the substrate 2. A ground plane 10 formed in a second conductive layer of the substrate. Stub walls 12 are formed in an outer ring track and an inner wall track of the substrate 2. Vias 11 extend from the RF ground plane 10 to upper surfaces of the stub walls 12. Further stub walls 13 are formed on the lower surface of the substrate with additional vias extending between ground plane 10. See U.S. Patent Application Pub. No. 2007-0139143, pgphs [0027] - [0028].

Applicant's claims broadly encompass the foregoing embodiment, and recite the following:

A method of assembling a packaged high frequency circuit module including the steps of :
 providing a ceramic substrate having one or more elongate stub walls projecting from a planar surface thereof;
 firing the ceramic substrate;
 processing the substrate until the planar surfaces of the one or more elongate stub walls are uniform and parallel;
 applying a conductive adhesive to the processed surfaces of the one or more stub walls; and
 placing a housing lid over the substrate, the lid having one or more members projecting from a planar surface thereof so that the members align with the one or

more stub walls of the substrate to form a composite structure.

Contrary to the Examiner's assertion, the foregoing claimed combination is distinguishable over *APA*. Particularly, *APA* fails to disclose or suggest at least providing a ceramic substrate having one or more elongate stub walls projecting from a planar surface thereof, and processing the substrate including elongate stub walls until the planar surfaces of the elongate stub walls are uniform and parallel, and applying a conductive adhesive to the processed surfaces of the stub walls.

First, as shown in Applicants' Fig. 1, *APA* does not include one or more elongate stub walls. The Examiner alleges that the conductive tracks 6, 7 provided in the drawing are analogous to Applicant's claimed elongate stub walls. See Office Action, pg 6. One of ordinary skill would understand, however, that the conductive tracks 6, 7 cannot function as elongate stub walls. The conductive tracks 6, 7 are deposited on the planar surface of the substrate after the surfaces have been ground ("processed"). To do so before would destroy the operability of these components, and arguably remove the conductive tracks from the surface of the substrate. As discussed on page 4, lines 12-23 of Applicant's disclosure, surface planarization of the substrate is necessary prior to RF component fabrication. Applicant respectfully submits that "RF component fabrication" includes the laying of conductive tracks 6, 7 on the planar surface of the substrate. Thus, the Examiner's interpretation of the conductive tracks 6,7 as Applicant's claimed elongate stub walls is inconsistent with Applicants' disclosure and the application of conductive tracks 6, 7 as understood by one of ordinary skill.

The Examiner is reminded that to properly anticipate a claim, the document must disclose, explicitly or implicitly, each and every feature recited in the claim.

See Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Because the Examiner's rejection fails to meet this standard, for at least these reasons, Applicant believes that *APA* fails to anticipate claims 1-6 and 10-15 as alleged.

In numbered paragraph 11 on page 7 of the Office Action, claims 1-3 and 6 are rejected under 35 U.S.C. §102(b) for alleged anticipation by *Kasai et al* (U.S. Patent No. 6,924,429). Applicant respectfully traverses this rejection.

Upon careful review, Applicant respectfully submits that the *Kasai* patent fails to disclose or suggest at least processing the substrate until the planar surfaces of the elongate stub walls are uniform and parallel, and applying a conductive adhesive to the processed surfaces of the stub wall as recited in independent claim 1.

On page 7 of the Office Action, the Examiner alleges that this reference discloses, "processing the surface of the substrate." Applicant respectfully submits that the Examiner's citation of Applicant's claim feature is a gross generalization and simplification of the same for the sake of rendering a rejection. A correct and more proper citation of this feature reads processing the substrate until the planar surfaces of the elongate stub walls are uniform and parallel. The Examiner's improper claim citation notwithstanding, however, the *Kasai* patent still fails to disclose or suggest Applicant's claimed processing step. While the *Kasai* patent does disclose that the substrate is processed, this processing merely forms a rectangular cavity in the surface of the substrate. See Kasai, col. 12, lines 27-28. One of ordinary skill would understand that the formation of a rectangular cavity in the surface of the substrate in no way is analogous to processing the substrate until the planar surfaces of the elongate stub walls are uniform and parallel.

For at least the foregoing reasons, the Kasai patent fails to anticipate claims 1-6 and 10-15 such that withdrawal of this rejection is respectfully requested.

In numbered paragraph 13 on page 8 of the Office Action, claims 1-3, 5, 6, 10 and 13-15 stand rejected under 35 U.S.C. §103(a) for alleged unpatentability over *McHerron et al* (U.S. Patent No. 6,046,074) in view of the *Kasai* patent. Applicant respectfully traverses this rejection.

The Examiner alleges that the *McHerron* patent discloses every element recited in Applicant's claims except for firing the ceramic substrate. The *McHerron* patent is relied on in an effort to remedy this deficiency.

Applicant's, however, disagree with the Examiner's assessment of the *McHerron* patent as this reference falls short in disclosing or suggesting those features as alleged in the Office Action.

The *McHerron* patent discloses a ceramic substrate 14 having a single planar surface 30 onto which a thin film interconnect structure 22 and a thin film sealband 32 are deposited. See McHerron, col. 4, line 5 - col. 5, line 39. However, this reference fails to illustrate or otherwise disclose features on the substrate that one of ordinary skill would reasonably interpret as a stub wall. It appears that the only raised element on substrate 14 that is in contact with the lid 12 is the thin film sealband 32. The sealband 32 includes layers 34, 36, 38 (chromium, nickel, gold) that are deposited onto a polished mating surface 18 of the substrate 14. It appears that the *McHerron* patent teaches away from Applicant's claimed processing step. This reference discloses, "before thin film interconnect structure 22 is deposited on substrate 14, the entire substrate surface 30 is lapped and polished so that a smooth, planar surface is obtained." See Id., col. 4, lines 13-16. If elongate stub

walls were provided on the substrate of the *McHerron* patent, then the ability to lap and polish the substrate surface would be frustrated. Of particular note, Applicant's claimed embodiment is designed to prevent the lapping and polishing of an entire planar surface of the substrate. See Applicant's disclosure, pg. 4, line 19 to page 5, line 5.

While not acquiescing to the alleged disclosure of the *Kasai* patent as it relates to this rejection, Applicant does submit that this reference fails to remedy the deficiencies of the *McHerron* patent with respect to the combination of features recited in claim 1.

In summary, the *McHerron* and *Kasai* patents when applied individually or collectively fail to disclose or suggest every element recited in Applicant's claims. For at least this reason, a *prima facie* case of obviousness has not been established.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hosp. Sys. V. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). For at least the above reasons, Applicant respectfully requests that the rejection of claims 1-6 and 10-15 under 35 U.S.C. §103 be withdrawn.

Conclusion

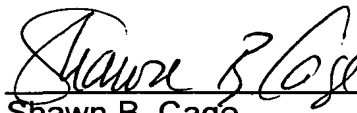
By the foregoing amendments and remarks, Applicant respectfully submits that claims 1-6 and 10-15 are allowable and this application is in condition for allowance. In the event the Examiner believes that unresolved issues remain, the Examiner is invited to the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 19, 2008

By:

A handwritten signature in black ink, appearing to read "Shawn B. Cage", is written over a horizontal line.

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Fig.1.

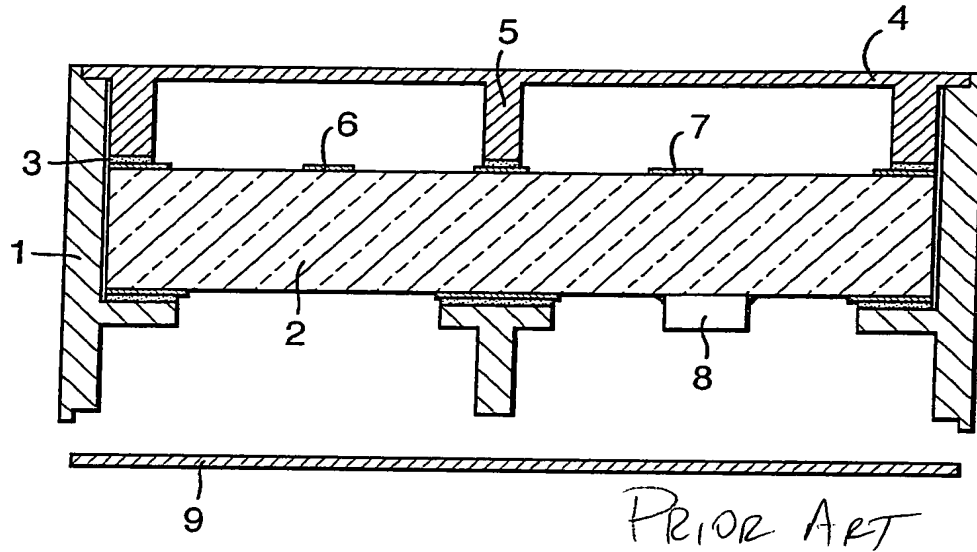


Fig.2.

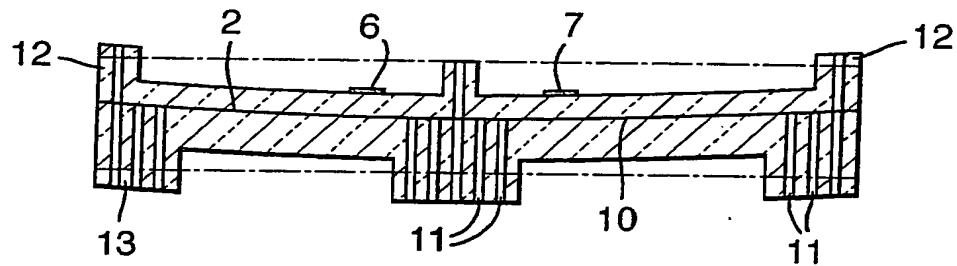


Fig.3.

